

a guide rail including an axially elongating rolling element rolling groove in each of sides thereof, and extended in an axial direction;

a slider including rolling element rolling grooves respectively opposed to the rolling element rolling grooves of the guide rail, and straddling the guide rail to be relatively movable in the axial direction via a number of cylindrical rollers, the rollers serving as rolling elements interposed between the opposed rolling element rolling grooves; and

separators each having: a separator body interposed between adjacent the cylindrical rollers; and an arm portion integrally formed on the separator body and contacting at least one of axial end flat faces of the cylindrical rollers,

wherein the slider includes a slider body having a rolling element path passing through the body in the axial direction; and a pair of end caps respectively having curved direction change paths through which a pair of the rolling element rolling grooves communicates with the rolling element path, the end caps being respectively fixed to axial end faces of the slider body; a guide groove guiding the arm portions of the separators in a circulation direction of the cylindrical rollers when the cylindrical rollers circulate through the pair of the rolling element rolling grooves, the direction change paths, and the rolling element path,

wherein a width of the guide groove is larger than a width of each of the arm portions, the width of the guide groove in a region of each of the direction change paths is larger than the width of the guide groove in a region where the cylindrical rollers linearly move, and end portions of each of the arm portions are chamfered, the end portions being directed in the circulation direction of the cylindrical rollers, and

wherein the direction change paths comprise an inner guide groove formed on an inner-diameter side of the direction change paths so that end portions thereof smoothly continue from the rolling element rolling groove.

Michioka uses a ball chain or belt (100, 101, 1, 61, 71, 81 and etc.,) which is integrated with plurality of spacer portions (4). This belt structure connects the spacer portions to each other to prevent the balls or spacer portions from falling off therefrom.

On the other hand, in the claimed invention, independent separators are separate from each other and thus expressed as "separators".

Thus, the claimed invention uses a different technique from that disclosed in the prior art for preventing the spacer/separator from falling off. Specifically, Michioka connects the spacer portions to each other by a belt. In contrast, according to the claimed invention, each of the separators includes an arm portion which is guided by the guide groove on the slider. It is submitted that the claimed arrangement is not taught or suggested by the prior art.

Further, the claimed invention is also characterized by the guide groove on the slider for guiding the arm portion of the separator. Michioka fails to disclose the arm portion on the spacer, and correspondingly fails to disclose the guide groove on the slider. Instead, Michioka discloses the guide groove on a straight motion area as shown in left part of the Fig. 5. Michioka is silent as to the guide groove on a direction changing area, as recited in the claims.

More specifically, claim 1 recites the presence of a guide groove in both a region of the direction change path and a region where the cylindrical rollers linearly move (straight motion area). Therefore, Michioka fails to disclose at least the guide groove in the region of the direction change path.

Therefore, the claimed invention would not have been obvious from Michioka alone or in combination with Pitner.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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